

Use Attainability Analysis

for

WBID 0034 Birkhead Branch

Submitted by

Missouri Department of Natural Resources Staff

To

Missouri Department of Natural Resources  
Water Protection Program

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet A - Water Body Identification

Water Body Name (from USGS 7.5' quad):	Birkhead Branch
8-digit HUC:	07110004
Missouri WBID #:	0034
County:	Lincoln
Upstream Legal Description:	East border of Sec. 17 T49N R 2W
Downstream Legal Description:	SE 1/4 SE 1/4 Sec. 21 T49N R 2W
Upstream Coordinates:	UTM 690524 4319934
Downstream Coordinates:	UTM 691899 4317716
Discharger Facility Name(s):	
Discharger Permit Number(s):	
Number of Sites Evaluated:	3
Name of Surveyor and Telephone Number:	Tucker Fredrickson (573) 526-4210
Organization:	MDNR
Position:	Environmental Specialist

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Tucker Fredrickson Date: 5/23/05

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## Field Data Sheets for Recreational Use Stream Surveys

### Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: <u>0034-01</u>	Site Location Description: <u>Low water bridge</u>
Site GPS Coordinates: <u>690524 4319434</u>	<u>OP # 1</u> <u>crossing County Road 691</u>
Date & Time: <u>5/23/05</u> <u>4:25</u>	Facility Name: <u>Birkhead Branch</u>
Personnel: <u>Tucker Fredrickson</u>	Permit Number:
Current Weather Conditions: <u>Sunny 80°F</u>	Weather Conditions for Past 7 days: <u>Approx. 0.5" of rain</u> <u>Temp High - 80°F</u>
Photo Ids: Upstream: <u>18</u>	Downstream: <u>19</u> Other:

#### Uses Observed\*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

NA

**Surrounding Conditions\*:** (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>NA</u>	

#### Evidence of Human Use\*:

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: <u>NA</u>				

**Site Locations Map(s):** Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

\*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

**Stream Morphology:**

**Upstream View Physical Dimensions:**

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): <u>25</u>	Length (ft): <u>100</u>	Avg. Depth (ft): <u>1</u>	Max. Depth (ft): <u>2.5</u>
<input type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft <sup>3</sup> /sec):	

**Downstream View Physical Dimensions:**

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Run	Width (ft): <u>10</u>	Length (ft): <u>20</u>	Avg. Depth (ft): <u>0.25</u>	Max. Depth (ft): <u>0.5</u>
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft <sup>3</sup> /sec):	

**Substrate\*:** (These values should add up to 100%.)

<u>30</u> % Cobble	<u>30</u> % Gravel	% Sand	% Silt	% Mud/Clay	<u>40</u> % Bedrock
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**Aquatic Vegetation\*:** (note amount of vegetation or algal growth at the assessment site)

Surface coverage - <u>25%</u> algae periphyton <u>25%</u> substrate coverage
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**Water Characteristics\*:** (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input checked="" type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input type="checkbox"/> Fine sediments	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

**Comments:** Please attach additional comments (including information from interviews) to this form.

Water backing up from stone dam someone built. 50 minnows observed

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Juher Fredrickson Date: 5/23/05

Organization: MDNR Position: ES

0034-01-up



0034-01-ds



# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet B - Site Characterization (A separate data sheet must be completed for each site)

Missouri WBID #: 0034-02	Site Location Description: Low water bridge crossing		
Site GPS Coordinates: 692061 4318442	Op # 2 County Road 692		
Date & Time: 5/23/05 4:40	Facility Name: Birkhead Branch		
Personnel: Tucker Fredrickson	Permit Number:		
Current Weather Conditions: Sunny 80°F	Weather Conditions for Past 7 days: Approx. 0.5" rain		
Photo Ids: Upstream: 20	Downstream: 21	Other: Temp High 80s	

### Uses Observed\*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)  
NA

### Surrounding Conditions\*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/country parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: NA	

### Evidence of Human Use\*:

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: NA				

**Site Locations Map(s):** Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

\*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

## Data Sheet B - Site Characterization

Page Two - WBID # 0034

## Stream Morphology:

## Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft): <u>2.5</u>
<input checked="" type="checkbox"/> Pool	Width (ft): <u>25</u>	Length (ft): <u>100</u>	Avg. Depth (ft): <u>1.0</u>	Max. Depth (ft): <u>2.5</u>
<input type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft <sup>3</sup> /sec):	

## Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Run	Width (ft): <u>6</u>	Length (ft): <u>20</u>	Avg. Depth (ft): <u>0.5</u>	Max. Depth (ft): <u>0.75</u>
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft <sup>3</sup> /sec):	

## Substrate\*: (These values should add up to 100%.)

<u>40</u> % Cobble	<u>50</u> % Gravel	% Sand	<u>10</u> % Silt	% Mud/Clay	% Bedrock
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## Aquatic Vegetation\*: (note amount of vegetation or algal growth at the assessment site)

algae surface coverage <u>25%</u>	periphyton <u>75%</u> substrate coverage
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## Water Characteristics\*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input checked="" type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input checked="" type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Jochen Fredrickson Date: 5/23/05  
 Organization: MDNR Position: ES

0034-02-up



0034-02-ds



# Field Data Sheets for Recreational Use Stream Surveys

## Data Sheet B - Site Characterization (A separate data sheet must be completed for each site)

Missouri WBID #: <u>0034-03</u>	Site Location Description: <u>Low water bridge crossing Roffes Lane (Pvt. Drive) off Hwy. 47</u>	
Site GPS Coordinates: <u>691899 4317716</u>	OP # <u>3</u>	
Date & Time: <u>5/23/05 5:00</u>	Facility Name: <u>Birhead Branch</u>	
Personnel: <u>Tucker Fredrickson</u>	Permit Number:	
Current Weather Conditions: <u>Sunny 80°F</u>	Weather Conditions for Past 7 days: <u>Approx. 0.5" of rain Hi Temp 80's</u>	
Photo Ids: Upstream: <u>22</u> Downstream: <u>23</u> Other:		

### Uses Observed\*:

<input type="checkbox"/> Swimming	<input type="checkbox"/> Skin diving	<input type="checkbox"/> SCUBA diving	<input type="checkbox"/> Tubing	<input type="checkbox"/> Water skiing
<input type="checkbox"/> Wind surfing	<input type="checkbox"/> Kayaking	<input type="checkbox"/> Boating	<input type="checkbox"/> Wading	<input type="checkbox"/> Rafting
<input type="checkbox"/> Hunting	<input type="checkbox"/> Trapping	<input type="checkbox"/> Fishing	<input checked="" type="checkbox"/> None of the above	<input type="checkbox"/> Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

NA

### Surrounding Conditions\*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

<input type="checkbox"/> City/county parks	<input type="checkbox"/> Playgrounds	<input type="checkbox"/> MDC conservation lands	<input type="checkbox"/> Urban areas	<input type="checkbox"/> Campgrounds
<input type="checkbox"/> Boating accesses	<input type="checkbox"/> State parks	<input type="checkbox"/> National forests	<input type="checkbox"/> Nature trails	<input type="checkbox"/> Stairs/walkway
<input type="checkbox"/> No trespass sign	<input type="checkbox"/> Fence	<input type="checkbox"/> Steep slopes	<input checked="" type="checkbox"/> Other: <u>NA</u>	

### Evidence of Human Use\*:

<input type="checkbox"/> Roads	<input type="checkbox"/> Foot paths/prints	<input type="checkbox"/> Dock/platform	<input type="checkbox"/> Livestock Watering	<input type="checkbox"/> RV / ATV Tracks
<input type="checkbox"/> Rope swings	<input type="checkbox"/> Camping Sites	<input type="checkbox"/> Fire pit/ring	<input type="checkbox"/> NPDES Discharge	<input type="checkbox"/> Fishing Tackle
<input checked="" type="checkbox"/> Other: <u>NA</u>				

**Site Locations Map(s):** Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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## Data Sheet B - Site Characterization

Page Two - WBID #0034:

## Stream Morphology:

## Upstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Run	Width (ft): 5	Length (ft): 15	Avg. Depth (ft): 0.5	Max. Depth (ft): 0.75
<input type="checkbox"/> Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft <sup>3</sup> /sec):	

## Downstream View Physical Dimensions:

<input type="checkbox"/> Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input type="checkbox"/> Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
<input checked="" type="checkbox"/> Pool	Width (ft): 15	Length (ft): 15	Avg. Depth (ft): 1.5	Max. Depth (ft): 3.5
<input type="checkbox"/> Flow	Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Estimated (ft <sup>3</sup> /sec):	

## Substrate\*: (These values should add up to 100%.)

20 % Cobble	30 % Gravel	50 % Sand	% Silt	% Mud/Clay	% Bedrock
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## Aquatic Vegetation\*: (note amount of vegetation or algal growth at the assessment site)

algae surface coverage - 15% periphyton 25% substrate coverage
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## Water Characteristics\*: (Mark all that apply.)

Odor:	<input type="checkbox"/> Sewage	<input type="checkbox"/> Musky	<input type="checkbox"/> Chemical	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:
Color:	<input type="checkbox"/> Clear	<input checked="" type="checkbox"/> Green	<input type="checkbox"/> Gray	<input type="checkbox"/> Milky	<input type="checkbox"/> Other:
Bottom Deposit:	<input type="checkbox"/> Sludge	<input type="checkbox"/> Solids	<input checked="" type="checkbox"/> Fine sediments	<input type="checkbox"/> None	<input type="checkbox"/> Other:
Surface Deposit:	<input type="checkbox"/> Oil	<input type="checkbox"/> Scum	<input type="checkbox"/> Foam	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Other:

Comments: Please attach additional comments (including information from interviews) to this form.

50 minnows observed, tire

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Signed: Jochen Fredrickson Date: 5/23/05  
 Organization: MDNR Position: ES

0034-03-up



0034-03-ds

